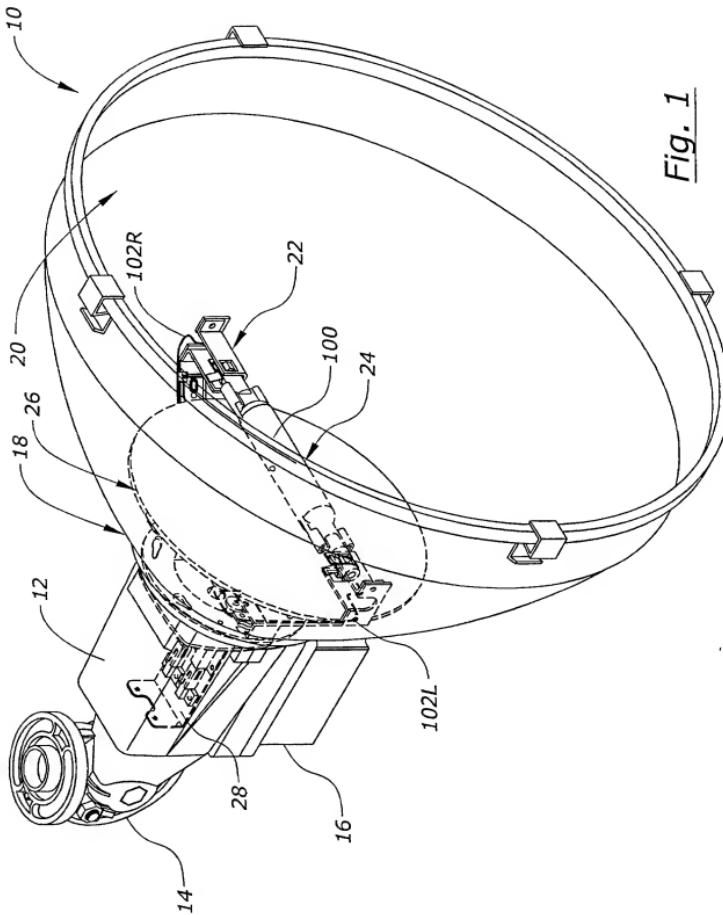




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Fig. 1

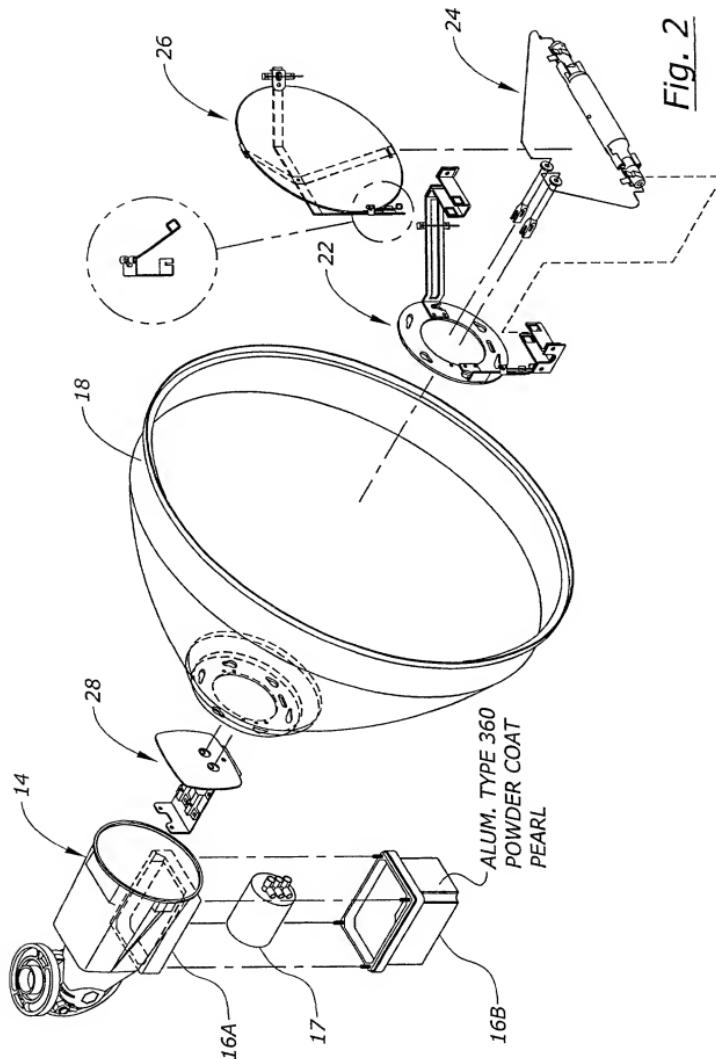


20000101-E0024000



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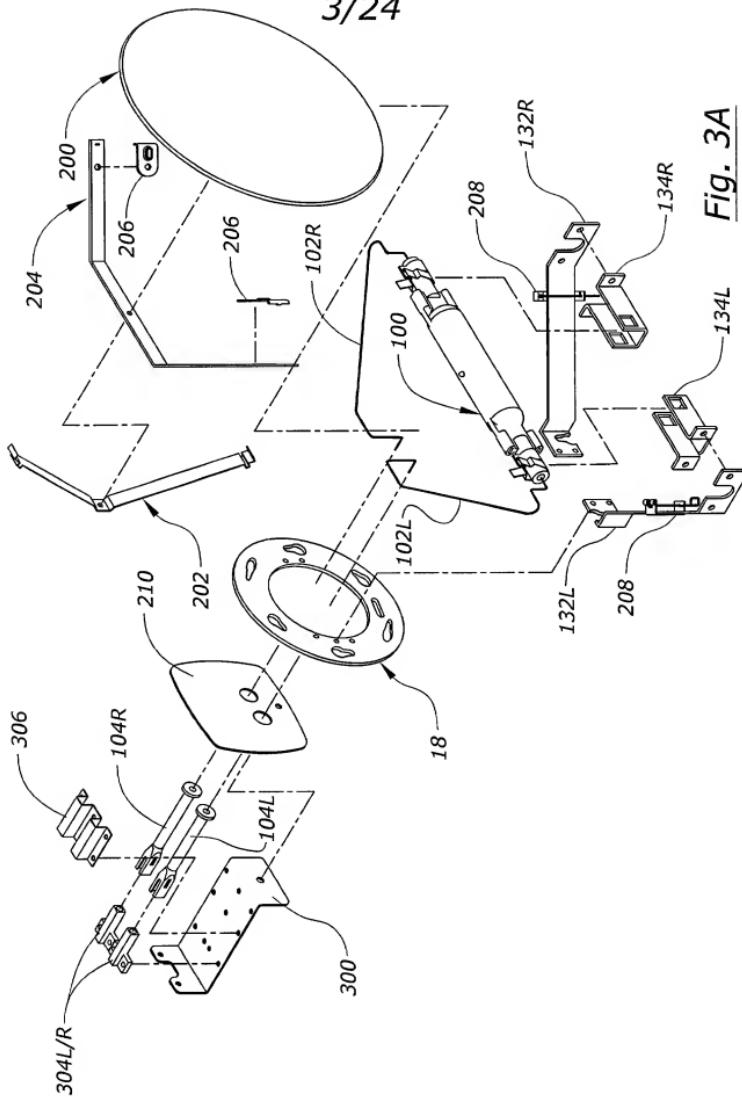


Fig. 3A

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PART #	DESCRIPTION
18	.125 THK. ALUM. 5052-H32
134L&R	.100 THK. ALUM. 5052-H32, ANODIZE PER MIL SPEC MIL-A-8625F, TYPE II, CLASS 1, CLEAR, LIGHT ETCH.
202	.020 THK. PREANODIZED ALUM. (REFLECTOR SHEET) OVERLAP (3") TEFILON TAPE OVER END AND TRIM W/ SCISSORS, 99% PTFE. TEFILON, GRADE: MILITARY, TEMP RANGE: -400° +500°F, WIDTH: 1.50, THICKNESS: .003, ELONGATION: 50% MIN., SPEC. GRAVITY: 0.90 G/C, COLOR: WHITE, SPECS. MEETS MILITARY SPEC. T-277-30A.
204	.080 THK. ALUM. 5052-H32
206	.060 ALUM. 5952-H32
208	.030 THK. ALUM. 5052-H32, STAINLESS STEEL 302 SPRING TEMPER
210	.060 THK. ALUM. 5052-H32
300	.060 THK. ALUM.

Fig. 3B



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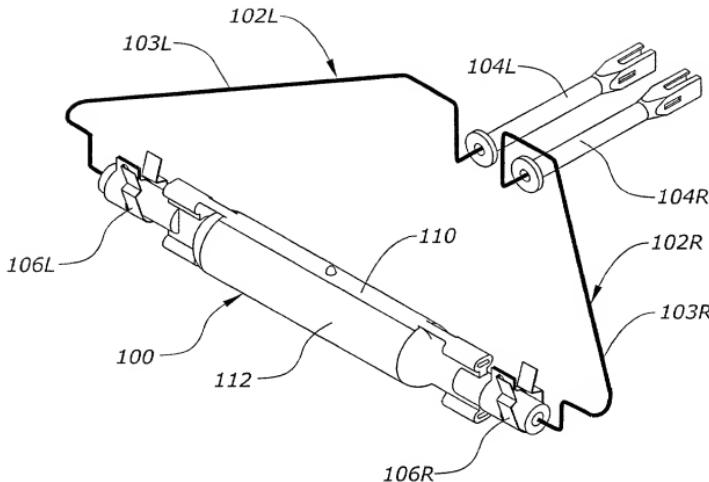


Fig. 4

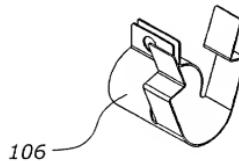


Fig. 5

.015 THK. 300 SERIES
SS FULL HARD TEMPER
ROCKWELL C40-45.
(PASSIVATE PER
ASTM A 380)



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200707160220001

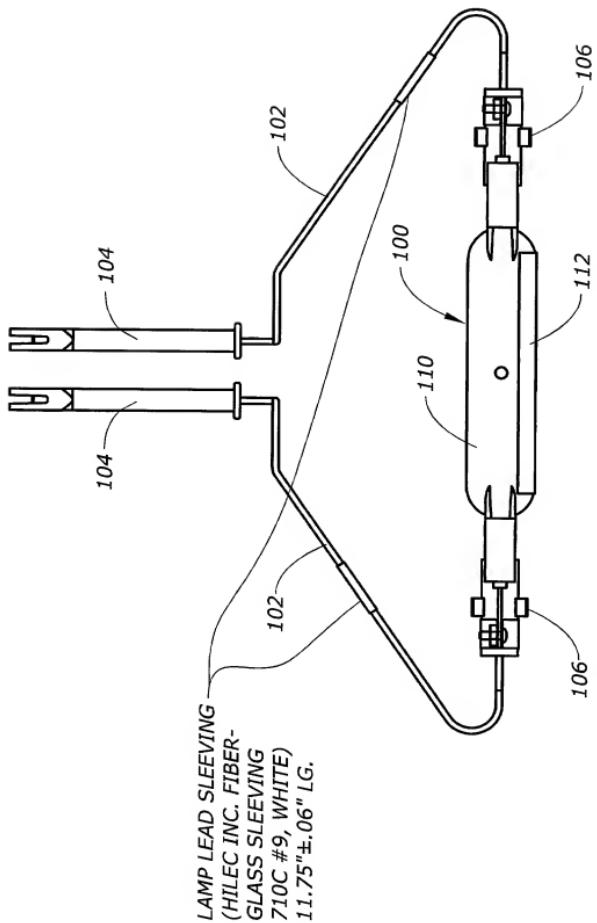


Fig. 6A

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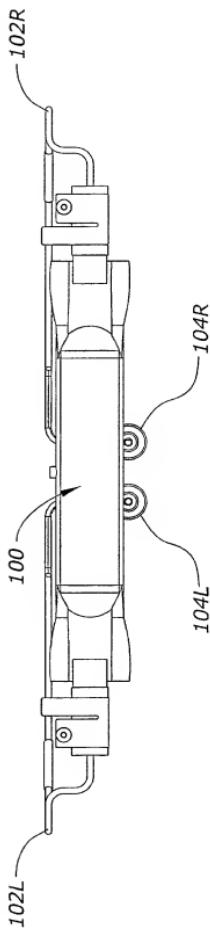


Fig. 6B

2000707 " 60224007



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20000101 20220001

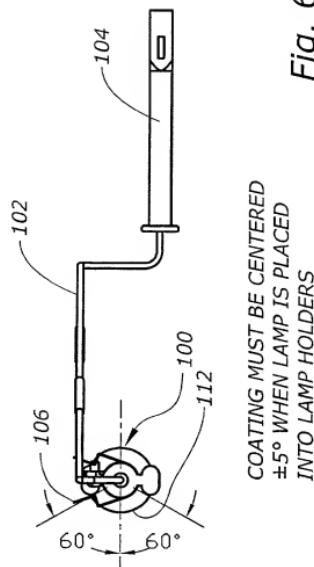


Fig. 6C

200707 "E022600T



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ORIENTATE THE 120° REFLECTIVE COATING OFF OF THIS END OF LAMP ONLY.
PINCH SEALS ARE NOT ALWAYS IN LINE WITH EACH OTHER.

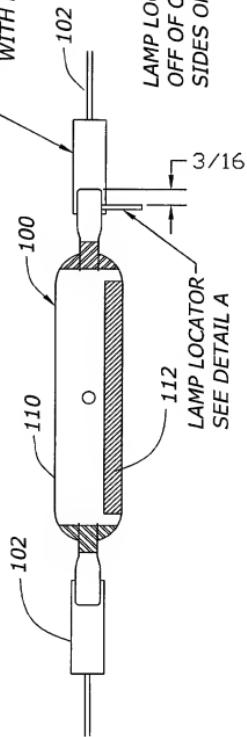
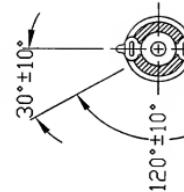


Fig. 7A



Fig. 7B



DIELECTRIC DICHROIC REFLECTIVE COATING -SEE NOTES

Fig. 7C

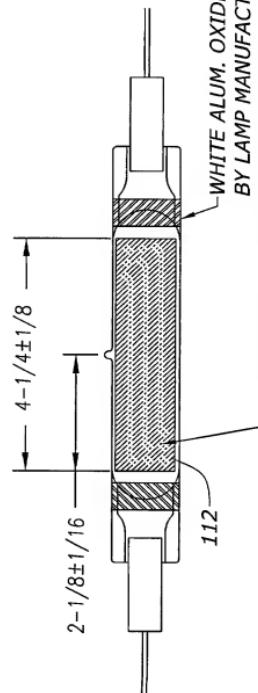


Fig. 7D

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NOTES:

1. REFLECTIVE COATED PARTS SHALL HAVE A TRANSMISSION AT NORMAL INCIDENCE OF LESS THAN 1% AVERAGE FROM 400NM TO 700 NM, AND GREATER THAT 70% AVERAGE TRANSMISSION AT NORMAL INCIDENCE FROM 800NM TO 1500NM. COATING SHALL BE DESIGNED FOR GREATER THAN 90% REFLECTION FROM 400NM TO 700NM.
2. REFLECTIVE COATING SHALL SURVIVE RAPID THERMAL SHOCK TO 900 DEGREES C. THIS SHALL BE TESTED FOR BY INSERTION OF A COATED WITNESS PLATE INTO A TEST CHAMBER HELD AT 900 DEGREES C; HOLDING THE WITNESS AT ROOM TEMPERATURE FOR 30 MINUTES, AND RAPID WITHDRAWAL OF THE WITNESS TO ROOM TEMPERATURE. THE COATING ON THE WITNESS PLATE SHALL SURVIVE THIS TEMPERATURE CYCLE WITH NO LOSS OF COATING.
3. REFLECTIVE COATING SHALL SURVIVE STANDARD 24 HOUR HUMIDITY TEST AT 49 DEGREES C. AND PASS QUICK TAPE TEST.
4. FILM CRACKING AND CRYSTALLIZATION OF THE REFLECTIVE COATING SHALL BE ACCEPTABLE, PROVIDED THAT NO COATING VOID SHALL BE LARGER THAT 0.010 INCHES IN ITS LARGEST DIMENSION.
5. COAT 360 DEGREES OF THE ARC TUBE WITH UV BLOCKING FILM. THE UV BLOCKING SHALL PRODUCE A COATING DESIGNED TO HAVE $T < OR = 1\%$ AVERAGE FROM 200NM TO 390NM WHILE MAINTAINING $T > OR = 95\%$ AVERAGE IN THE VISIBLE, APPROXIMATELY 400NM TO 700NM. THE FILM MUST WITHSTAND LONG TERM EXPOSURE TO APPROXIMATELY 1000° C.

10072703 - 101002

Fig. 7E



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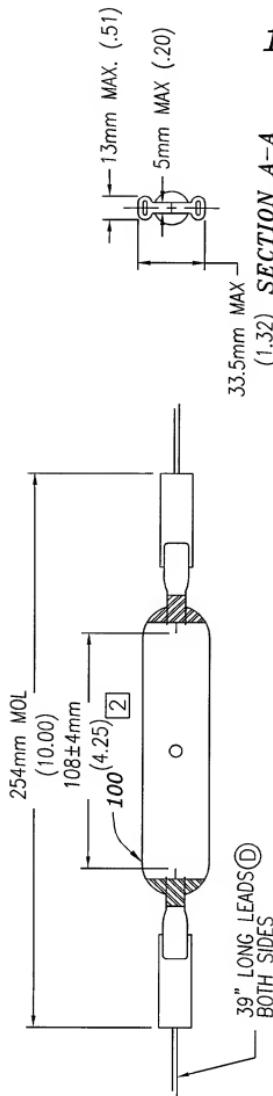


Fig. 8A

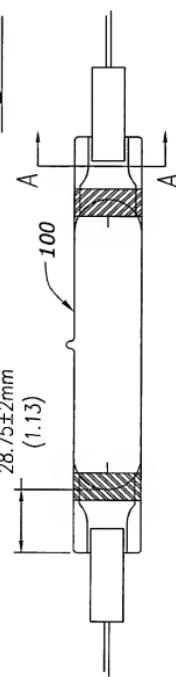


Fig. 8B

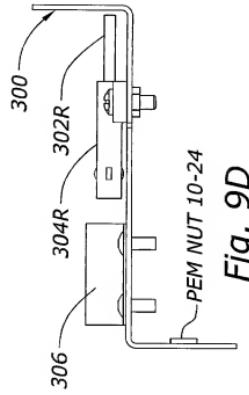
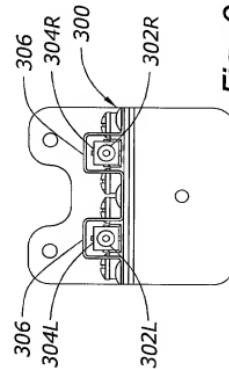
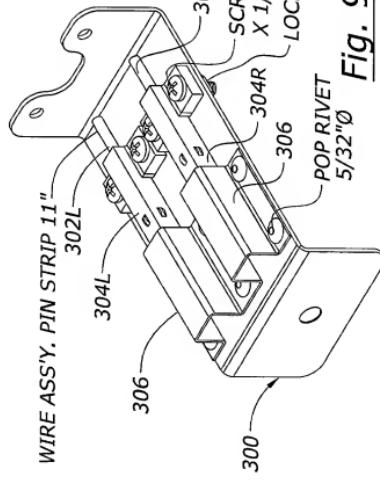
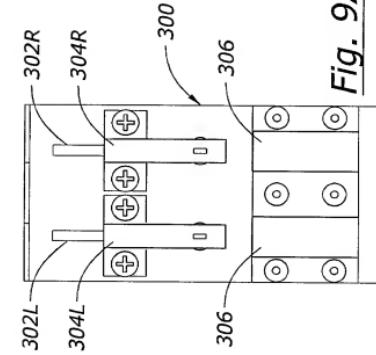


Fig. 8C

NOTE:
1. DIMENSIONS IN () ARE INCHES.
2. DIMENSION IS THE ARC LENGTH.
3. SYLVANIA LAMP NUMBER M2000T9/DE

Fig. 8D

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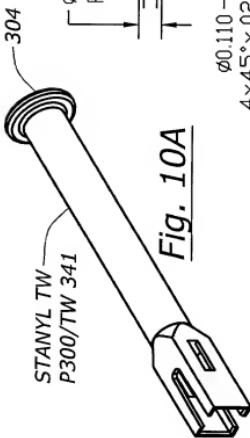


Fig. 10A

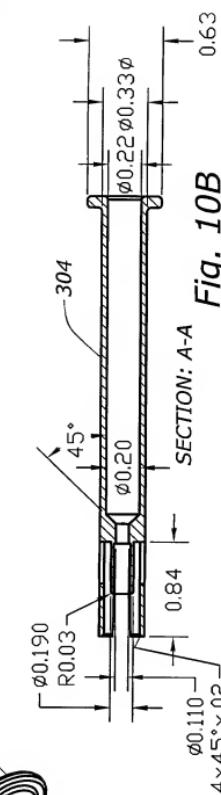


Fig. 10B

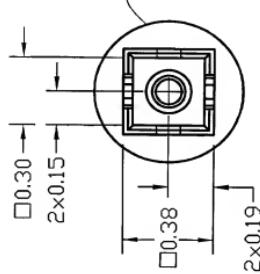


Fig. 10E

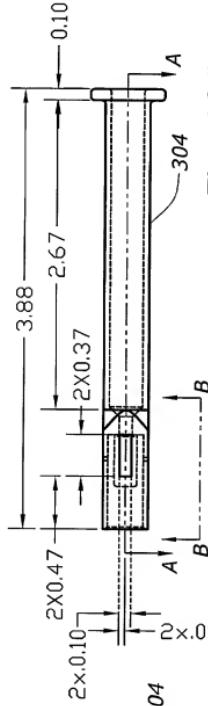
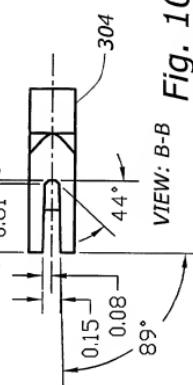


Fig. 10C



VIEW: B-B Fig. 10D

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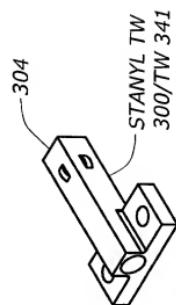


Fig. 11A

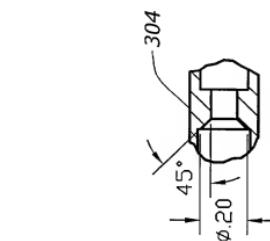


Fig. 11C
DETAIL B

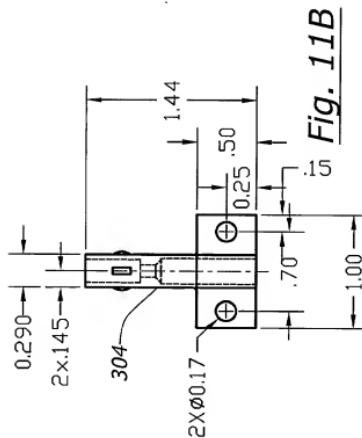


Fig. 11B

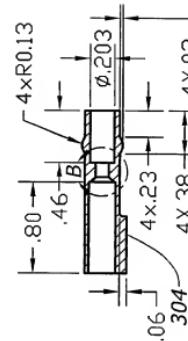


Fig. 11E
SECTION: A-A



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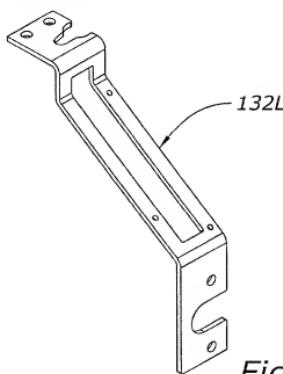
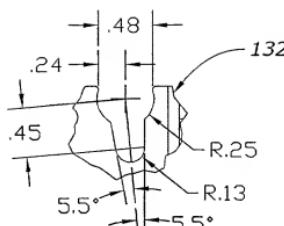


Fig. 12A



SECTION: A

Fig. 12B

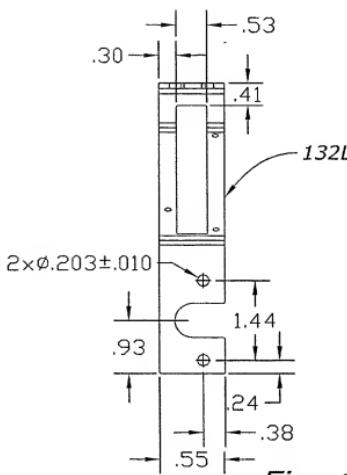


Fig. 12C

2007703-100000



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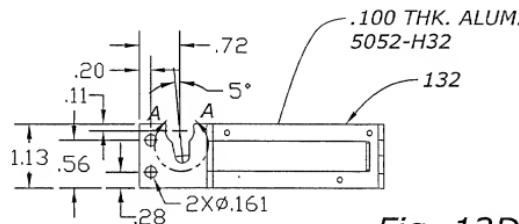


Fig. 12D

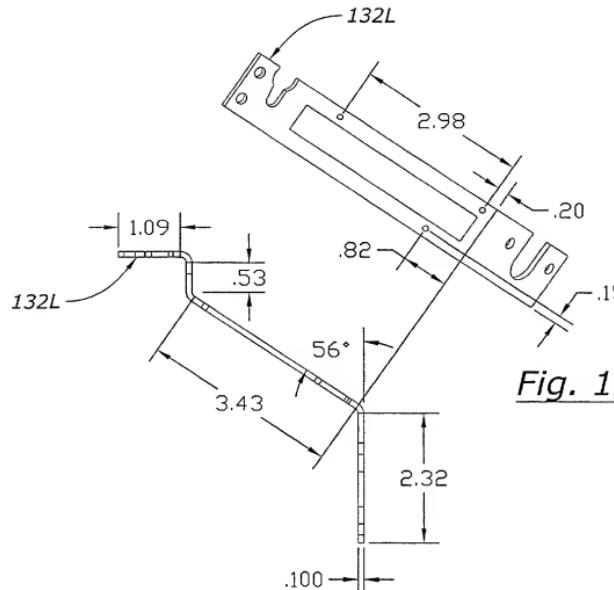


Fig. 12E

Fig. 12F

10072203-101002

O I P E JC89
OCT 10 2002
DEPARTMENT OF COMMERCE
U.S. PATENT AND TRADEMARK OFFICE

TITLE: High-Intensity Lighting Fixture
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ATTY. DKT. # P04723US1
Atty. Hansing - 515-288-3667

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2000T03" E00Z2200T

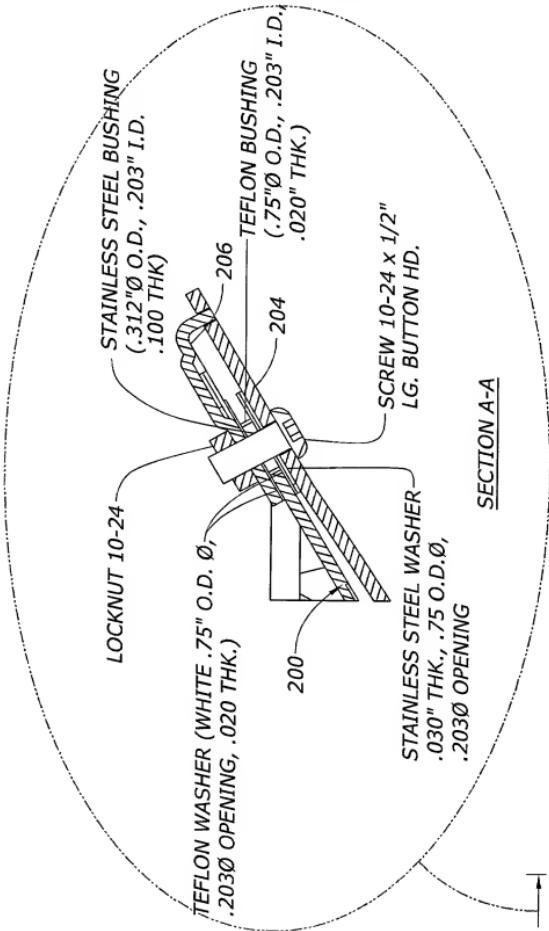
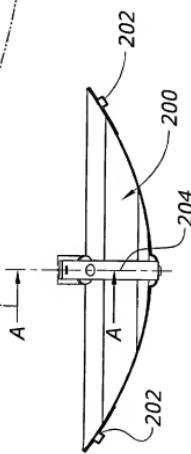


Fig. 13A





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10072703-101002

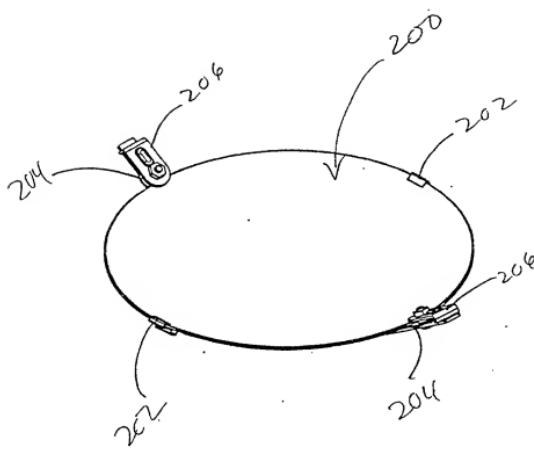


Fig. 13B

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2000107 00222007

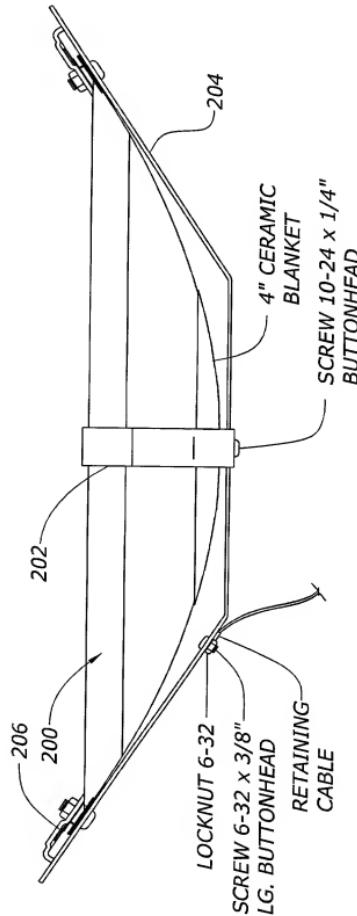


Fig. 13C

NOTE:

1. NO FINGER PRINTS OR FOREIGN MATTER ON MIRROR.
2. USE WHITE COTTON GLOVES WHEN ASSEMBLING.
2. DO NOT ATTEMPT TO CLEAN MIRROR.



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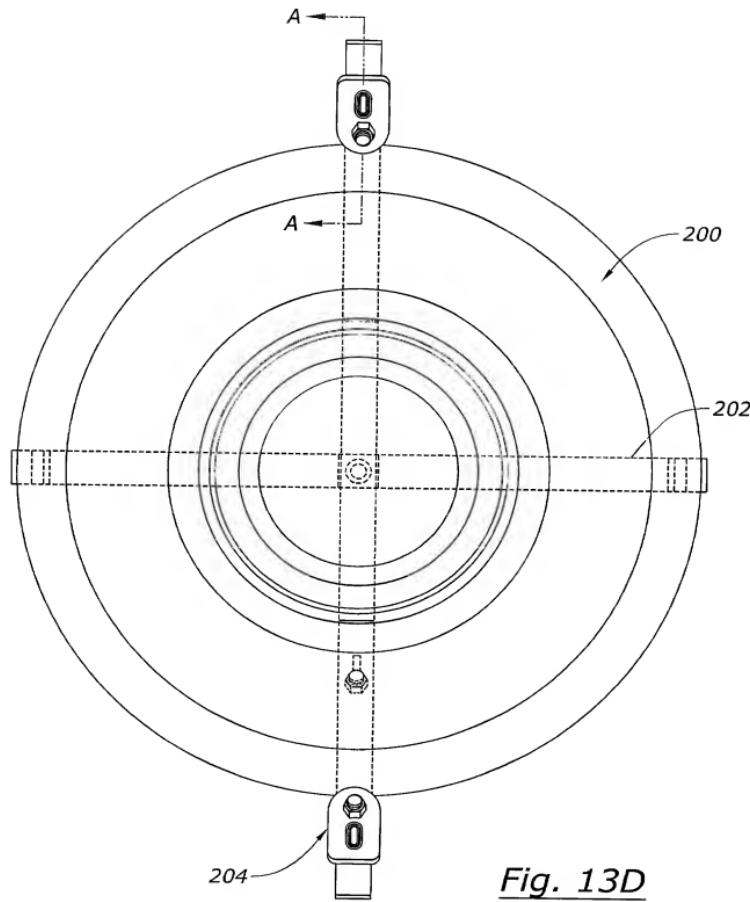


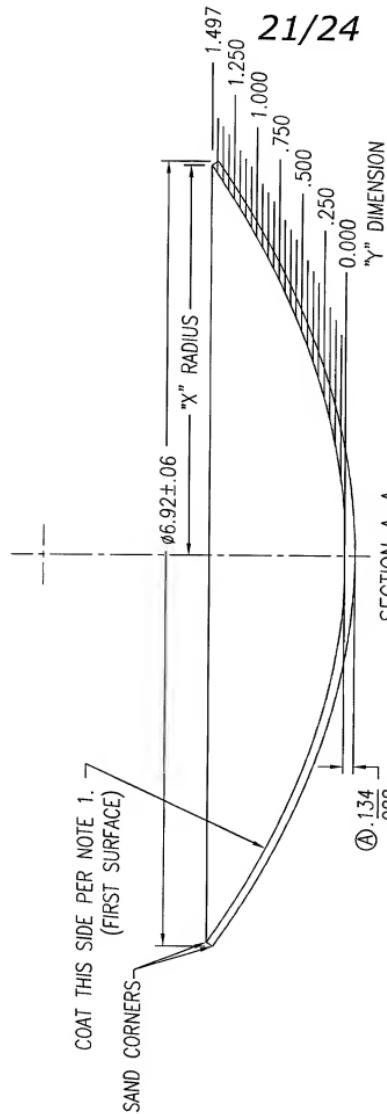
Fig. 13D

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2000TOP" 20022000T



NOTE:

1. COATING: DICHROIC COLD COATING WITH A REFLECTANCE OF >94% FROM 430-660 NM.
2. CURVATURE IS A 3-5/16" FOCAL LENGTH PARABOLA.

Fig. 13E



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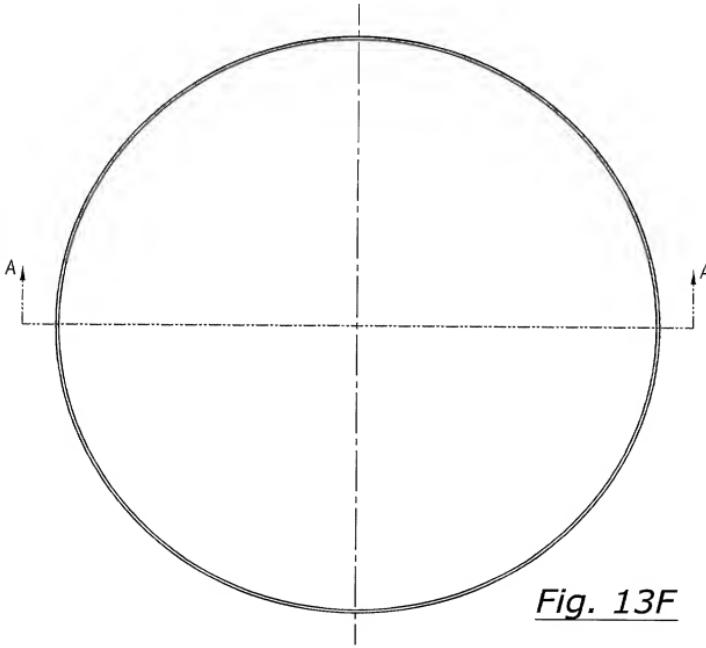


Fig. 13F

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"X" RAD	"Y" DIM
.911	.063
1.287	.125
1.576	.188
1.820	.250
2.035	.313
2.229	.375
2.408	.438
2.574	.500
2.730	.563
2.878	.625
3.018	.688
3.152	.750
3.281	.813
3.405	.875
3.524	.938
3.640	1.000
3.752	1.063
3.861	1.125
3.967	1.188
4.070	1.250
4.170	1.313
4.268	1.375
4.364	1.438
4.453	1.497

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Fig. 13G

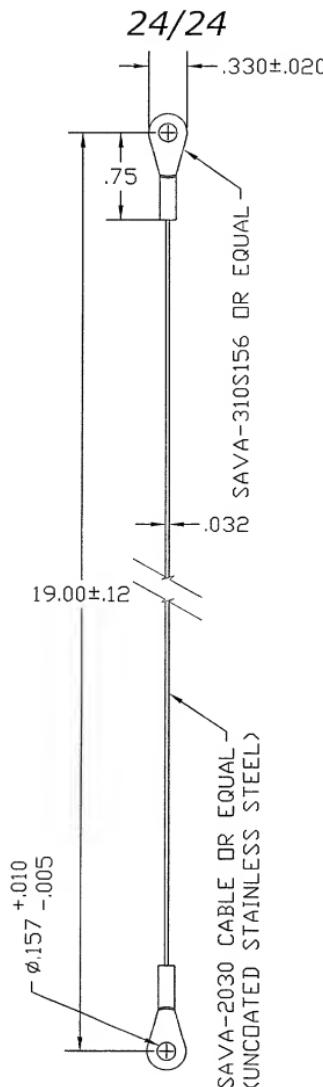


Fig. 13H